

# Students' Placement Office, IIT Kanpur

## **Project Verification Form**



Title of the Project	Fabrication and Experimental Investigation on a Parabolic	
	Trough Solar Collector	
Commencement Date	January 2016	
Completion Date	April 2016	
Project Supervisor	Asst. Professor Prashant Bagde	
Organization/Institution where the	Lovely Professional University, Phagwara, Punjab	
Project was accomplished		

**Project Description** (You can use extra A4 sheets in case you run out of space however the extra sheets should also have the seal & signature of the Project Supervisor or the relevant authority)

### **Objectives**

- The main objectives of this project are to provide clean source of power with zero emissions.
- To use the solar energy in a more efficient way.
- To design and construct a solar collector in order to produce steam or hot water.
- To implement solar collector for household purpose as a water heater to save energy and money.

### **Description**

A parabolic trough is a type of solar thermal collector that is straight in one dimension and curved as a parabola in the other two, lined with a polished metal mirror. The energy of sunlight which enters the mirror parallel to its plane of symmetry is focused along the focal line, where object are positioned that are intended to be heated. In our experiment we have achieved a maximum water temperature up to 56.7 °C. There are many applications of heated water in industries like Textile industry, Chemical industry, Machinery industry, Food and Beverages, Pharmaceutical industry for different purpose and processes. These processes include, for example cleaning, cooking, bathing, coloring, bleaching, painting, distillation, surface treatments, evaporation and other more application in our general life.

#### By appending your signatures to this form you acknowledge and agree that:

- This form along with the certificate would serve as the official document between the project supervisor and Students Placement Office, IIT Kanpur regarding verification of the student's project work
- The student will provide additional information and documentation relevant to his/her project upon request by the Students' Placement Office

- The student has clearly defined his/her individual role in projects done in cooperation with other students, faculty, groups or company personnel.
- Incorrectly over-stating the reach, impact and/or quantitative/qualitative results of a project is unethical.
- In case of violation of any of the above rules, Students' Placement Office, IIT Kanpur reserves the right to take necessary action including de-registering the student from the placement season and reporting the misconduct to the Institute Authorities.

Submitted by:-	Project Supervisor Details:-
Name: Ram Kishor Singh	Name: Prashant Bagde
Roll No: 20205272	Designation: Asst. Professor
Signature:	Signature: